ORDER NO. MD0512490C1
A6

Service Manual

Speaker System

SB-PM23P

Colour

(M)... Wood Type

SPECIFICATIONS

Specification

Type	1 way, 1 speaker system
Speaker(s)	
Full range	10 cm (4”) twin cone type (6)
Impedance	6
Input power (IEC)	20 W (Max)
Output sound pressure	83 dB/W (1.0 m)
Frequency range	51 Hz to 23 kHz (-16 dB)
	83 Hz to 22 kHz (-10 dB)
Dimensions (W x H x D)	139 x 227 x 136 mm
	(5-15/32” x 8-15/16” x 5-11/32”)
Mass	1.3 kg (2.9 lb.)

Notes :

1. Specifications are subject to change without notice.
 Mass and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

System : SC-PM23P-S	Music Center : SA-PM23P-S
	Front Speaker : SB-PM23P-M
System : SC-PM23PC-S	Music Center : SA-PM23PC-S
	Front Speaker : SB-PM23P-M

System	SC-PM23P/PC-S
Music Centre System	SA-PM23P/PC-S
Front Speaker	SB-PM23P-M

© 2005 Matsushita Electric Industrial Co. Ltd.. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

1. Assembling and Disassembling

"ATTENTION SERVICER"
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

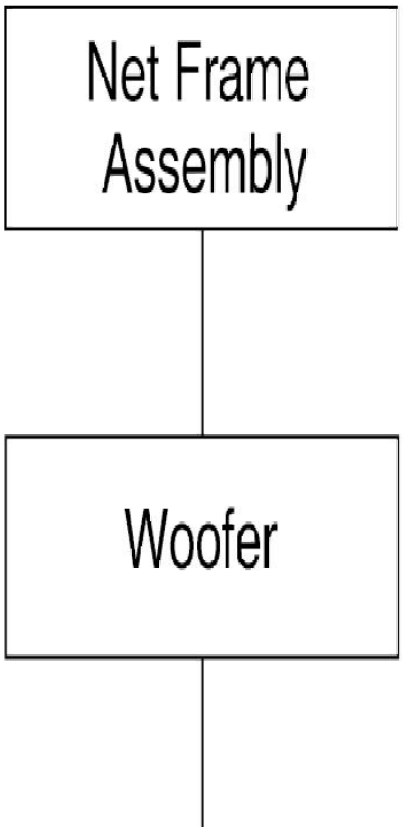
1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures.**
   Special reassembly procedures are described only when required.
3. **Select items from the following index when checks or replacement are required.**
4. **Refer to the Parts No. on the page of "Parts Location and Replacement Parts List" (Section 5), if necessary.**

Below is the list of disassembly sections

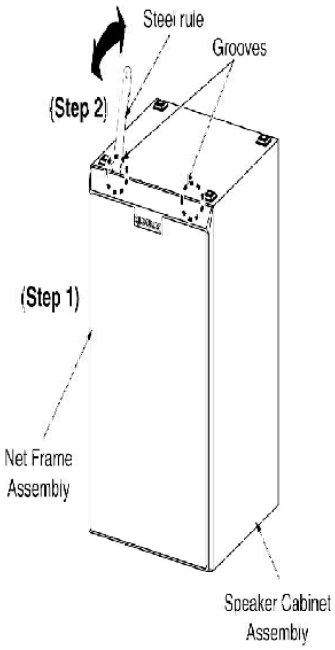
- **Disassembly of Net Frame Assembly**
- **Disassembly of Woofer**
- **Disassembly of Speaker Cabinet Assembly**

1.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.
To assemble the unit, reverse the steps shown in the chart as below.

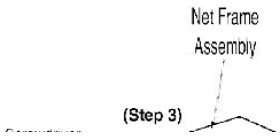


1.2. Disassembly of Net Frame Assembly

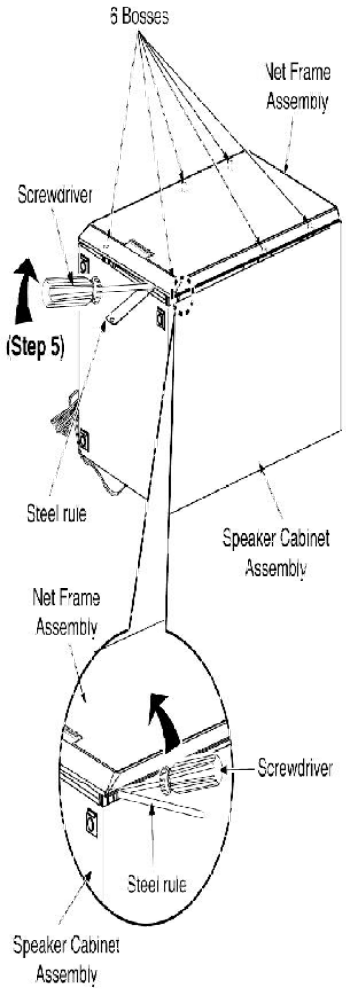


Step 1: Upset the Speaker unit as shown above.
Step 2: Insert a steel rule into the grooves of Speaker Cabinet Assembly. Push the steel rule foward and backward as arrow shown.

Caution:
Do not exert strong force as it may damage the Net Frame Assembly.



Step 3: Upset the Speaker unit as shown above.
Step 4: Insert a flathead screwdriver above the steel rule as shown.



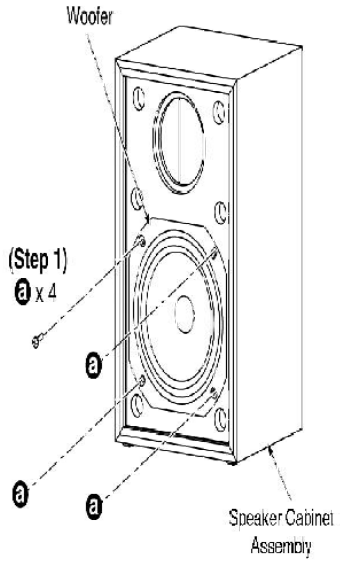
Step 5: Apply light force around the sides of Speaker Cabinet Assembly to push up the Net Frame Assembly.

Caution:

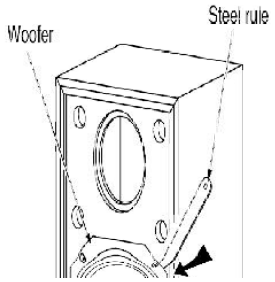
Do not exert strong force as it may damage the Net Frame Assembly.

1.3. Disassembly of Woofer

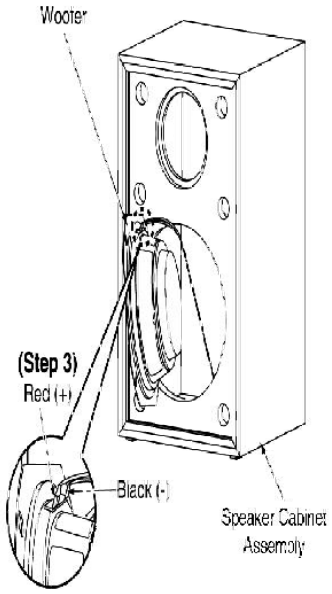
Follow (step 1) to (step 5) in item 1.2.



Step 1: Remove 4 screws from Woofer.

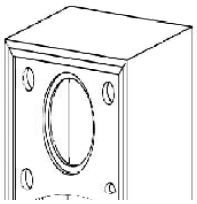


Step 2: Insert a steel rule between the Woofer and Speaker Cabinet Assembly to push out the Woofer.

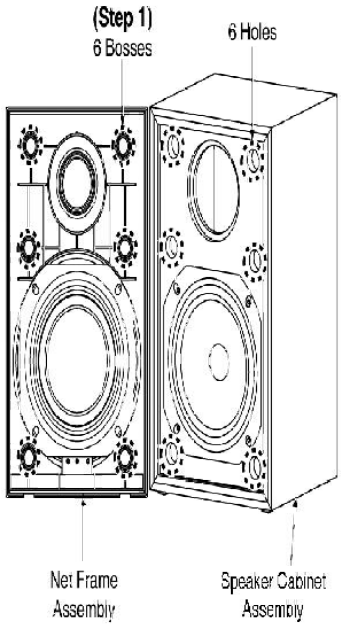


Step 3: Remove the Woofer by detaching the (+) Red and (-) Black wires.

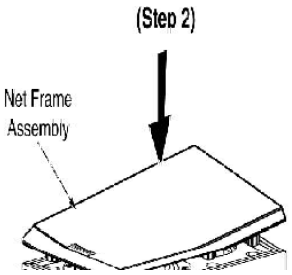
- Disassembly of Speaker Cabinet Assembly



1.4. Assembly of Speaker unit



Step 1: Scrape off using the scriber and clean up the remaining glue at the 6 bosses and 6 holes and replace with new glue.



Step 2: Replace the Net Frame Assembly firmly back to the Speaker Cabinet Assembly.

2. Connection of the Speaker Cables

- Be sure to connect speaker cables before connecting the AC power supply cord.

- The load impedance of any speaker used with this unit must be 6 .

- Be sure to connect the cable from the right speaker to the right terminal and the cable from the left speaker to the left terminal.

1. Twist and pull off the vinyl tip of the speaker cords. If the speaker

cords do not have vinyl tips, connect them directly to the terminals. Make sure the bare ends of the wires are not unravelled.

2. Insert the wire to the rear panel of the unit and close the lever.

Notes :

- To prevent damage to circuitry, never short-circuit positive (+) and negative (-) speaker wires.

- Be sure to connect only positive (red) wires to positive (+) terminals and negative (black) wires to negative (-) terminals.

Placement

Speakers are designed identically so that no left or right channel orientation is necessary.

Connection

Use only the supplied speakers

The combination of the main unit and speakers provide the best sound. Using other speakers can damage the unit and sound quality will be negatively affected.

Note

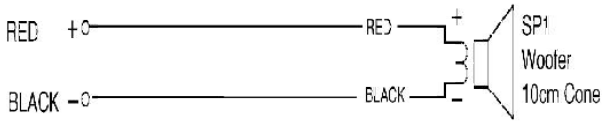
- Keep your speakers at least 10 mm (13/32”) away from the system for proper ventilation.

- These speakers do not have magnetic shielding. Do not place them near televisions, personal computers or other devices easily influenced by magnetism.

- You cannot take the front net off the speakers.

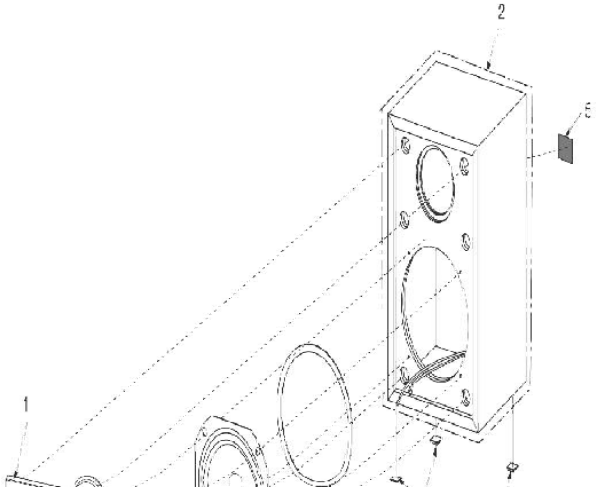
Caution
- Use the speakers only with the recommended system. Failure to do so may lead to damage to the amplifier and/or the speakers, and may result in the risk of fire. Consult a qualified service person if damage has occurred or if you experience a sudden change in performance.
- Do not attach these speakers to walls or ceilings.

3. Connection of the Wiring Diagram

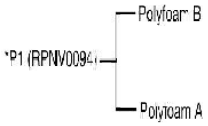


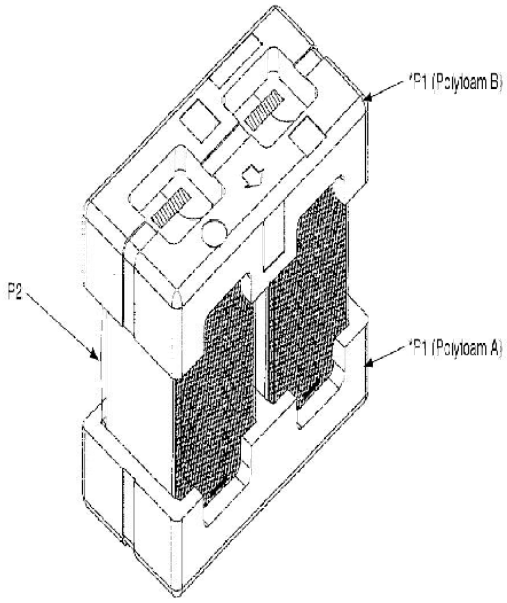
4. Cabinet Parts Location

4.1. Exploded view



4.2. Packaging





5. Replacement Parts List

Notes :

- Important safety notice :

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

- [M] markings in the Remarks columns indicates parts supplied by PAVCSG.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	RFKGBPM23P-M	NET FRAME ASS'Y	[M]
2	RFKHBPM23P-M	SPEAKER CAB. ASS'Y	[M]
3	RMQ0819	EVA PACKING (WOOFER)	[M]
4	XTB4+16AFJK	SCREW(STAND)	[M]
5	RGNV0170-K	SPEC LABEL	[M]
6	RKA0072-KJ	LEG CUSHION	[M]
		PACKING MATERIALS	
P1	RPNV0094	POLYFOAM	[M]
P2	RPFV0056	MIRAMAT BAG	[M]
		SPEAKER	
SP1	305-M0PM2310	WOOFER UNIT	[M]